CLAIMS

1. A photodetector comprising:

($K \times M \times N$) photodiodes $PD_{k,m,n}$ (K being an integer of no less than 2; k being integers of no less than 1 and no more than K; M being an integer of no less than 1; m being integers of no less than 1 and no more than M; N being an integer of no less than 2; and n being integers of no less than 1 and no more than N), each generating an electric charge by an amount corresponding to an intensity of light incident thereon;

($M \times N$) integrating circuits, one of each being provided in correspondence to K photodiodes $PD_{k,m,n}$ (k = 1 to K) among the ($K \times M \times N$) photodiodes $PD_{k,m,n}$ and each successively inputting and accumulating the electric charges generated at the K photodiodes $PD_{k,m,n}$ (k = 1 to K) and outputting a voltage that is in accordance with the amount of the accumulated electric charges; and

A/D converting circuits, each A/D converting circuit being provided in correspondence to one of said ($M \times N$) integrating circuits, and outputting a digital value according to the voltage outputted from the corresponding integrating circuit.

2. The photodetector according to Claim 1, further comprising CDS circuits, each being arranged between said integrating circuit and said A/D converting circuit, inputting the voltage output from the integrating circuit, and outputting a voltage expressing the fluctuation of the input voltage over a fixed time.

3. The photodetector according to Claim 1, wherein the ($K \times M \times N$) photodiodes $PD_{k,m,n}$ are arranged in M rows and ($K \times N$) columns either two-dimensionally (when M = 2) or one-dimensionally (when M = 1), with

each photodiode $PD_{k,m,n}$ being positioned at the position of the m-th row and $(n + (k - 1)N)$-th column.